

IN THE CLAIMS:

1-7. (Cancelled).

8-21. (Withdrawn from consideration in this application).

22. (Currently Amended) A light valve for use in high contrast reflective microdisplays, comprising:

a twisted nematic mode reflective liquid crystal cell;

a color filter positioned to accept non-polarized light incident to the light valve;

a linear polarizer positioned between said color filter and said liquid crystal cell to impart a polarization to the incident light;

an analyzer positioned in the path of the light reflected by said liquid crystal cell; and

a retarder positioned between said liquid crystal cell and said analyzer in the path of the light reflected by said liquid crystal cell, the retarder having a retardation value to reduce ellipticity of the reflected light;

wherein light incident to the light valve is generally off-axis to said liquid crystal cell, and whereby polarization axes of light incident and light reflected are generally matched when the liquid crystal cell is in an off state.

whereby said retarder functions to decrease ellipticity and alter the polarization axis of light reflected by said liquid crystal cell.

23. (Original) The light valve of claim 22 wherein said liquid crystal cell is an LCoS cell.

24. (Original) The light valve of claim 22 wherein light incident to the light valve is between 100 and 200 off-axis.

25. (Original) The light valve of claim 23 wherein light incident to the light valve is 150 off-axis.

26. (Original) The light valve of claim 22 wherein said liquid crystal cell has a twist angle ranging from 400 to 650.

27. (Original) The light valve of claim 26 wherein said liquid crystal cell is in twisted nematic mode.

28. (Original) The light valve of claim 22 wherein the horizontal axis of said polarizer and the horizontal axis of said analyzer are 900 apart.

29. (Original) The light valve of claim 22 wherein said retarder has a retardation value ranging from 430 nanometers to 630 nanometers and a retardation angle ranging from 87.6° to 90.20° in a red band of light.

30. (Original) The light valve of claim 29 wherein said retarder has a retardation value centered at 530 nanometers and a retardation angle centered at 890 in a red band of light.

31. (Original) The light valve of claim 22 wherein said retarder has a retardation value ranging from 350 nanometers to 550 nanometers and a retardation angle ranging from 87.50° to 90.50° in a green band of light.

32. (Original) The light valve of claim 31 wherein said retarder has a retardation value centered at 460 nanometers and a retardation angle centered at 89° in a green band of light.

33. (Original) The light valve of claim 22 wherein said retarder has a retardation value ranging from 280 nanometers to 460 nanometers and a retardation angle ranging from 87.70° to 90.30° in a blue band of light.

34. (Original) The light valve of claim 33 wherein said first retarder has a retardation value centered at 370 nanometers and a retardation angle centered at 890 in a blue band of light.

35. (Withdrawn from consideration in this application).

36. (Amended) A liquid crystal display system comprising:
a reflective liquid crystal on silicon type cell with a twisted nematic mode;
a color filter positioned to accept non-polarized light incident to the liquid crystal cell;
a linear polarizer positioned between the color filter and the liquid crystal cell; an analyzer positioned between the color filter and the liquid crystal cell; and a retarder positioned between the liquid crystal cell and the analyzer; the liquid crystal display system being adapted for operation with incident light off-axis relative to the liquid crystal cell, and wherein polarization and ellipticity of light reflected by the liquid crystal cell is different than the polarization and ellipticity of the incident light when the liquid crystal cell is in an on state.

37. (Previously added) The liquid crystal display system of claim 36 wherein the color filter and linear polarizer are positioned relative to the liquid crystal cell to receive incident light in a range of 10-15 degrees from an axis of the liquid crystal cell.

38. (Previously added) The liquid crystal display system of claim 36 wherein a horizontal axis of the linear polarizer and a horizontal axis of the analyzer are 90 degrees apart.

39. (Previously added) The liquid crystal display system of claim 36 wherein the liquid crystal cell is in twisted nematic mode.

40. (Previously added) The liquid crystal display system of claim 36 wherein the liquid crystal cell has a twist angle in twisted nematic mode in a range of 40 to 65 degrees.

41. (New) The liquid crystal display system of claim 36 wherein a polarization axis of the incident light is generally matched with a polarization axis of light reflected by the liquid crystal cell when the liquid crystal cell is in an off state.